UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,580	03/11/2004	Anton Dietrich	3691-661	4818

23117 7590 09/08/2005

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER	
PIZIALI, ANDREW T	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,580	DIETRICH ET AL.	
	Examiner	Art Unit	
	Andrew T. Piziali	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/12/04 & 3/11/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informality: The continuation information (see page 1) does not indicate that application 10/337,383 is now US Patent 6,723,211. Appropriate correction is requested.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 3-5, 8-11, 15, 17-20, 23-26, 30, 32 and 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of USPN 6,686,050 to Lingle et al. (hereinafter referred to as Lingle) in view of USPN 5,153,054 to Depauw et al. (hereinafter referred to as Depauw).

Regarding claims 1, 3-5, 8-11, 15, 17-20, 23-26, 30, 32 and 34, Lingle claims (see claims 1, 7, 9, 14-15, 17-18, 21 and 23) a coated article comprising a coating supported by a glass substrate, the coating comprising from the glass substrate outwardly at least the following layers:

at least one dielectric layer

an IR reflecting layer (silver, see claim 14)

a contact layer (oxide of NiCr, see claim 7)

at least one dielectric layer

an IR reflecting layer (silver, see claim 14)

a contact layer (oxide of NiCr, see claim 7)

at least one dielectric layer.

Lingle does not specifically mention placing a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying contact (sacrificial) layers, but Depauw discloses that it is known in the art to place a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial layers to protect the silver layer against corrosion (see entire document including column 3, lines 14-37, column 6, lines 26-35 and column 7, lines 41-50). Depauw even discloses that the location of the zinc oxide layer above the sacrificial metal layers is particularly important (column 4, lines 6-18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to place a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial layers, because the zinc oxide layers would protect the silver layer against corrosion.

Regarding claims 3, 9-11, 17 and 24-26, Lingle claims that the coated article may be heat treated (see claim 23).

Regarding claims 4-5, 8, 19-20, 23, 30 and 32, Lingle claims that the dielectric layers may comprise silicon rich silicon nitride wherein x/y is from 0.76 to 1.5 (see claims 1, 9, 18 and 21).

Regarding claims 9-11, 17 and 24-26, considering that the coated article is substantially identical in terms of substrate, structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification), it appears that the coated article inherently possesses the claimed properties.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

4. Claims 2 and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of USPN 6,686,050 to Lingle in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 8-11, 15, 17-20, 23-26, 30, 32 and 34 above, and further in view of any one of USPN 6,316,110 to Anzaki et al. (hereinafter referred to as Anzaki) or USPN 6,398,925 to Arbab et al. (hereinafter referred to as Arbab).

The applied prior art does not specifically mention adding aluminum to the zinc oxide layers, but Anzaki and Arbab each disclose that it is known in the art to add aluminum to zinc oxide layers that protect a silver layer from oxidation to improve adhesion to the silver layers and/or to make the zinc oxide layer conductive (see entire documents including column 1, lines 42-51 of Anzaki and column 4, lines 20-32 of Arbab). It would have been obvious to one having

ordinary skill in the art at the time the invention was made to make the zinc oxide layers from any suitable zinc oxide material, such as zinc oxide comprising aluminum, because the aluminum improves adhesion to the silver layers and/or because the aluminum makes the zinc oxide conductive, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

5. Claims 6-7 and 21-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of USPN 6,686,050 to Lingle in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 8-11, 15, 17-20, 23-26, 30, 32 and 34 above, and further in view of USPN 5,718,980 to Koch et al. (hereinafter referred to as Koch).

Lingle does not specifically claim a multi-layer dielectric layer, but Koch discloses that it is known in the art to use a silicon nitride dielectric layer or a multi-layer comprising a silicon nitride layer and a tin oxide layer (see entire document including column 3, lines 35-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the dielectric layer from any suitable dielectric material, such as a multi-layer of silicon nitride and tin oxide, because the multi-layer possesses the advantages of each layer, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

6. Claims 12-14, 27-29, 31 and 33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of USPN 6,686,050 to Lingle in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 8-11, 15, 17-20, 23-

26, 30, 32 and 34 above, and further in view of USPN 5,837,361 to Glaser et al. (hereinafter referred to as Glaser).

Lingle does not specifically claim that the coated article comprises a laminate, but Glaser discloses that it is known in the art to form a laminate so that the coated article can be used for anti-solar windows or as a motor vehicle window (see entire document including column 4, lines 25-33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to form a laminate, because the coated article could then be used for anti-solar windows or as a motor vehicle window. Considering that the coated article is substantially identical in terms of substrate, structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification), it appears that the coated article inherently possesses the claimed properties.

7. Claims 12-14, 27-29, 31 and 33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of USPN 6,686,050 to Lingle in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 8-11, 15, 17-20, 23-26, 30, 32 and 34 above, and further in view of USPN 5,557,462 to Hartig et al. (hereinafter referred to as Hartig).

Lingle does not specifically claim that the coated article comprises a laminate, but Hartig and discloses that it is known in the art to laminate a coated article to another glass substrate to form an insulated glass window unit (see column 1, lines 13-24). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to laminate the coated article to another glass substrate, because the laminate could be used as an insulated glass window unit. Considering that the coated article is substantially identical in terms of substrate,

structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification), it appears that the coated article inherently possesses the claimed properties.

Claim Rejections - 35 USC § 102/103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 34 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 5,153,054 to Depauw.

Depauw discloses a coated article (see entire document including column 3, lines 21-37, column 6, lines 26-35, and column 7, lines 41-50) comprising a coating supported by a glass substrate wherein the coating comprises the following layers in the recited order from the glass substrate outwardly:

a zinc oxide layer

a silver layer contacting the zinc oxide layer

a stainless steel oxide layer (inherently contains Cr) contacting the silver layer

a second zinc oxide layer contacting the stainless steel layer.

Claim Rejections - 35 USC § 103

11. Claims 1, 3-7, 9-15, 17-22 and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,837,361 to Glaser in view of USPN 5,153,054 to Depauw.

Regarding claims 1, 3-7, 9-15, 17-22 and 24-34, Glaser discloses (see entire document including column 3, lines 17-66 and column 4, lines 45-58) a coated article comprising a coating supported by a glass substrate, the coating comprising at least the following layers from the glass substrate outwardly:

a dielectric layer

a zinc oxide layer

a silver layer

a nichrome oxide layer

a dielectric layer

a zinc oxide layer

a silver layer

a nichrome oxide layer

a dielectric layer.

Glaser does not specifically mention adding a zinc oxide layer above one or more of the sacrificial nichrome layers, but Depauw discloses that it is known in the art to a add a zinc oxide layer above sacrificial metal layers to protect the silver layer from corrosion (see entire document including column 3, lines 14-37). Depauw even discloses that the location of the zinc oxide layer above the sacrificial metal layers is particularly important (column 4, lines 6-18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to

place a zinc oxide layer above each of the overlying sacrificial metal layers, because the zinc oxide layers would protect the silver layer against corrosion.

Regarding claims 3, 9-14, 17, 24-29, 31 and 33, Glaser does not specifically mention heat treating the coated article, but Depauw discloses that it is known in the art to heat treat an article to make it suitable for automotive applications (column 4, lines 25-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to heat treat the article, because heat treating allows for use of the coated article in automotive glass applications.

Regarding claims 4-7, 19-22 and 30-33, Glaser discloses that the dielectric layers may comprise silicon nitride and/or a layer of tin oxide (column 3, lines 26-66).

Regarding claims 9-14, 17, 24-29, 31 and 33, considering that the coated article is substantially identical in terms of substrate, structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification) it appears that the coated article inherently possesses the claimed properties.

Regarding claims 12-14, 27-29, 31 and 33, Glaser discloses that the coated article may be laminated to another glass substrate (column 4, lines 25-33).

12. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,837,361 to Glaser in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-7, 9-15, 17-22 and 24-34 above, and further in view of any one of USPN 6,316,110 to Anzaki or USPN 6,398,925 to Arbab.

The applied prior art does not specifically mention adding aluminum to the zinc oxide layers, but Anzaki and Arbab each disclose that it is known in the art to add aluminum to zinc oxide layers that protect a silver layer from oxidation to improve adhesion to the silver layers

and/or to make the zinc oxide layer conductive (see entire documents including column 1, lines 42-51 of Anzaki and column 4, lines 20-32 of Arbab). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the zinc oxide layers from any suitable zinc oxide material, such as zinc oxide comprising aluminum, because the aluminum improves adhesion to the silver layers and/or because the aluminum makes the zinc oxide conductive, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

13. Claims 1, 3-5, 9-15, 17-20 and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,557,462 to Hartig in view of USPN 5,153,054 to Depauw.

Regarding claims 1, 3-5, 9-15, 17-20 and 24-34, Hartig discloses (see entire document including column 6, lines 23-67) a coated article comprising a coating supported by a glass substrate, the coating comprising at least the following layers from the glass substrate outwardly:

a silicon nitride dielectric layer

a silver layer

a nichrome oxide layer

a silicon nitride layer

a silver layer

a nichrome oxide layer

a silicon nitride layer.

Hartig does not specifically mention placing a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial metal layers, but Depauw discloses that it is known in the art to place a zinc oxide layer directly below each silver

layer while also placing a zinc oxide layer above the overlying sacrificial metal layers to protect the silver layer against corrosion (see entire document including column 3, lines 14-37, column 6, lines 26-35 and column 7, lines 41-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to place a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial metal layers, because the zinc oxide layers would protect the silver layer against corrosion.

Regarding claims 3, 12-14, 17, 24-29, 31 and 33, Hartig does not specifically mention heat treating the coated article, but Depauw discloses that it is known in the art to heat treat an article to make it suitable for automotive applications (column 4, lines 25-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to heat treat the article, because heat treating allows for use of the coated article in automotive glass applications.

Regarding claims 9-14, 17, 24-29, 31 and 33, considering that the coated article is substantially identical in terms of substrate, structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification) it appears that the coated article inherently possesses the claimed properties.

Regarding claims 12-14, 27-29, 31 and 33, Hartig discloses that the coated article may be laminated to another glass substrate (column 1, lines 14-24).

14. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,557,462 to Hartig in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 9-15, 17-20 and 24-34 above, and further in view of any one of USPN 6,316,110 to Anzaki or USPN 6,398,925 to Arbab.

The applied prior art does not specifically mention adding aluminum to the zinc oxide layers, but Anzaki and Arbab each disclose that it is known in the art to add aluminum to zinc oxide layers that protect a silver layer from oxidation to improve adhesion to the silver layers and/or to make the zinc oxide layer conductive (see entire documents including column 1, lines 42-51 of Anzaki and column 4, lines 20-32 of Arbab). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the zinc oxide layers from any suitable zinc oxide material, such as zinc oxide comprising aluminum, because the aluminum improves adhesion to the silver layers and/or because the aluminum makes the zinc oxide conductive, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

15. Claims 6-7 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,557,462 to Hartig in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 9-15, 17-20 and 24-34 above, and further in view of USPN 5,718,980 to Koch.

Hartig does not specifically mention a using a multi-layer dielectric layer, but Koch discloses that it is known in the art to use a silicon nitride dielectric layer or a multi-layer comprising a silicon nitride layer and a tin oxide layer (see entire document including column 3, lines 35-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the dielectric layer from any suitable dielectric material, such as a multi-layer of silicon nitride and tin oxide, because the multi-layer possesses the advantages of each layer, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

16. Claims 1, 3-5, 9-11, 15, 17-20, 24-26, 30, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,336,999 to Lemmer et al. (hereinafter referred to as Lemmer) in view of USPN 5,153,054 to Depauw.

Regarding claims 1, 3-5, 9-11, 15, 17-20, 24-26, 30, 32 and 34, Lemmer discloses (see entire document including Figure 2) a coated article comprising a coating supported by a glass substrate, the coating comprising at least the following layers from the glass substrate outwardly:

a silicon nitride dielectric layer

a silver layer

a nichrome oxide layer

a silicon nitride layer

a silver layer

a nichrome oxide layer

a silicon nitride layer.

Lemmer does not specifically mention placing a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial metal layers, but Depauw discloses that it is known in the art to place a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial metal layers to protect the silver layer against corrosion (see entire document including column 3, lines 14-37, column 6, lines 26-35 and column 7, lines 41-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to place a zinc oxide layer directly below each silver layer while also placing a zinc oxide layer above the overlying sacrificial metal layers, because the zinc oxide layers would protect the silver layer against corrosion.

Regarding claims 3, 9-11, 17 and 24-26, Lemmer discloses that the coated article may be used for automotive windows (column 1, lines 9-17), but Lemmer does not specifically mention heat treating the coated article. Depauw discloses that it is known in the art to heat treat an article to make it suitable for automotive applications (column 4, lines 25-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to heat treat the article, because heat treating allows for use of the coated article in automotive glass applications.

Regarding claims 9-11, 17 and 24-26, considering that the coated article is substantially identical in terms of substrate, structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification), it appears that the coated article inherently possesses the claimed properties.

17. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,336,999 to Lemmer in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 9-11, 15, 17-20, 24-26, 30, 32 and 34 above, and further in view of any one of USPN 6,316,110 to Anzaki or USPN 6,398,925 to Arbab.

The applied prior art does not specifically mention adding aluminum to the zinc oxide layers, but Anzaki and Arbab each disclose that it is known in the art to add aluminum to zinc oxide layers that protect a silver layer from oxidation to improve adhesion to the silver layers and/or to make the zinc oxide layer conductive (see entire documents including column 1, lines 42-51 of Anzaki and column 4, lines 20-32 of Arbab). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the zinc oxide layers from any suitable zinc oxide material, such as zinc oxide comprising aluminum, because the

aluminum improves adhesion to the silver layers and/or because the aluminum makes the zinc oxide conductive, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

18. Claims 6-7 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,336,999 to Lemmer in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 9-11, 15, 17-20, 24-26, 30, 32 and 34 above, and further in view of USPN 5,718,980 to Koch.

Lemmer does not specifically mention a using a multi-layer dielectric layer, but Koch discloses that it is known in the art to use a silicon nitride dielectric layer or a multi-layer comprising a silicon nitride layer and a tin oxide layer (see entire document including column 3, lines 35-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the dielectric layer from any suitable dielectric material, such as a multi-layer of silicon nitride and tin oxide, because the multi-layer possesses the advantages of each layer, and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

19. Claims 12-14, 27-29, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,336,999 to Lemmer in view of USPN 5,153,054 to Depauw as applied to claims 1, 3-5, 9-11, 15, 17-20, 24-26, 30, 32 and 34 above, and further in view of any one of USPN 5,557,462 to Hartig or Applicant's Disclosure.

Lemmer does not specifically disclose that the coated article may be laminated to another glass substrate (column 1, lines 14-24), but Hartig and Applicant's Disclosure each disclose that it is known in the art to laminate a coated article to another glass substrate to form an insulated glass window unit (see column 1, lines 13-24 of Hartig and [0003] of applicant's disclosure).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to laminate the coated article to another glass substrate to form an insulated glass window unit. Considering that the coated article is substantially identical in terms of substrate, structure, layer materials, and layer thicknesses, compared to the claimed article (and the article taught by the specification), it appears that the coated article inherently possesses the claimed properties.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

9/6/05

ANDREW T. PIZIALI
PATENT EXAMINER